

REMARKS

This paper is submitted in response to the Office action mailed on February 28, 2008. This paper withdraws claims 6, 8-10, and 16-20. Accordingly, after entry of this Amendment and Response, claims 1-4 will be pending.

I. Examiner Interview

The Assignee's representative Robert M. Tuttle (registration no. 54,504) conducted an interview on June 24, 2008 with Examiner Patel to discuss the rejections under 35 U.S.C. §§ 101, 102, 112. A subsequent interview was conducted on June 30, 2008 with Examiner Patel as well as the supervisory Examiner for the case. The Assignee thanks Examiner Patel for her time and suggestions with regard to overcoming the rejections.

II. Restriction

In the Office action, the Examiner alleges three distinct inventions:

- I. Claims 1-4, drawn to modeling the static timing behavior of a combinatorial gate, classified in class 703, subclass 14;
- II. Claims 6-10, drawn to classifying a combinatorial gate, classified in class 703, subclass 14; and
- III. Claims 16-20, drawn to a static timing engine, classified in class 703, subclass 19.

The Examiner requires restriction to one of the aforementioned inventions under 35 U.S.C. § 121. In response to the Restriction Requirement, the Assignee elects Group I, claims 1-4, with traverse and without prejudice to reasserting the withdrawn claims later in prosecution. Accordingly, claims 6, 8-10, and 16-20 are hereby withdrawn.

II. Claim Rejections Under 35 U.S.C. § 112

a. Indefiniteness rejections

Claims 1-4 stand rejected as allegedly indefinite under 35 U.S.C. § 112 because the terms "evaluate node," "dynamic circuit," "labeling," "near dynamic circuit", and "dynamic signal" are allegedly vague and indefinite.

At the conclusion of the examiner interviews, Examiner Patel indicated that she would withdraw the § 112 rejection of the words "evaluate node," "dynamic circuit," "labeling," and "dynamic signal" in view of the Specification, prior art, and technical treatise cited by the Assignee during the interview (Weste et al.).

Examiner Patel also requested further clarification of the meaning of the remaining term, "near dynamic circuit." A claim should only be declared indefinite if it remains

"insolubly ambiguous without a discernible meaning after all reasonable attempts at construction." *Metabolite Labs., Inc. v. Lab. Corp. of Am. Holdings*, 370 F.3d 1354, 1366, 71 USPQ2d 1081, 1089 (Fed. Cir. 2004) (emphasis added). As will be appreciated by one of ordinary skill in the art of static timing analysis, a domino circuit is a species of the dynamic circuit genus. See e.g., Weste et. al. Further, a domino circuit may include an implementation of a dynamic circuit where the clocked logic portion of the gate is followed by an inverter. This arrangement may allow for cascading of domino circuits capable of evaluating in a single pre-charge cycle and may allow for the propagation of a dynamic signal. The term "near domino" circuit or "near domino" gate is defined in at least paragraph 29 of the Specification and in FIG. 3 as a logic gate whose inputs receive a data signal and a clock signal and whose output provides a data signal. Just as "dynamic circuit" is a genus of the species "domino circuit", the claimed "near dynamic circuit" is a genus of the species "near domino circuit", which is fully described in the Specification. The Assignee respectfully submits that the claim term "near dynamic circuit" may refer, in some embodiments, to a combinatorial logic gate whose inputs receive a data signal and a clock signal and whose output provides a data signal that is dynamic in nature. For at least these reasons, the Assignee respectfully submits that this claim term is not "insolubly ambiguous" in light of the specification in conjunction with the understanding of one of ordinary skill in the art of static timing analysis.

b. Incomplete rejections

Claims 1-4 also stand rejected under 35 U.S.C § 112 as allegedly being incomplete for omitting essential steps. The Assignee has amended claim 1 as suggested by Examiner Patel to overcome this rejection by changing the word "propagating" to "modeling"¹ in order to maintain consistency with the preamble. For at least this reason, the Assignee respectfully submits that independent claim 1, as amended, and dependent claims 2-4, are in a condition for allowance.

III. Claim Rejections Under 35 U.S.C. § 101

Claims 1-4 stand rejected under 35 U.S.C § 101 as allegedly claiming non-statutory subject matter. The Assignee has amended claim 1 as suggested by Examiner Patel during the Examiner interviews to include the act of "storing the modeled output signal in a report."² The Assignee respectfully submits that amended independent claim 1, as well as dependent claims 2-4, result in a useful, concrete, or tangible product and are not merely abstract ideas.

¹ Support for this amendment can be found in at least paragraphs 29-32.

² Support for this amendment can be found in at least paragraphs 5 and 24.

As such, claims 1-4 are directed to statutory subject matter and are in a condition for allowance.

IV. Claim Rejections Under 35 U.S.C. § 102

Claims 1, 3, and 4 stand rejected under 35 U.S.C § 102 as allegedly being anticipated by Norton et al., "Transistor-level Sizing and Timing Verification of Domino Circuits in the Power PC Microprocessor" (hereinafter "*Norton*"). During the Examiner interviews, Examiner Patel indicated that she would withdraw the § 102 rejections for claims 1, 3, and 4 because *Norton* only labels nodes as either clock, data, dynamic, latch or gated, and does not label them as "near dynamic", which is illustrated in FIG. 3 and described in paragraphs 29.

V. Claim Rejections Under 35 U.S.C. § 103

Claims 2 stands rejected under 35 U.S.C § 103 as allegedly being anticipated by *Norton* in view of Zhao, "Timing-Driven Partitioning and Timing Optimization of Mixed Static-Domino Implementations" (hereinafter "*Zhao*"). The Assignee respectfully submits that dependent claim 2, which stems from claim 1, is not anticipated by *Norton* in view of *Zhao* and therefore in condition for allowance.

VI. Conclusion

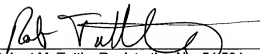
The Assignee thanks the Examiner for her thorough review of the application. The Assignee respectfully submits the present application, as amended, is in condition for allowance and respectfully requests the issuance of a Notice of Allowability as soon as practicable.

This Amendment is submitted contemporaneously with a petition for a 1-month extension of time in accordance with 37 CFR § 1.136(a). Accordingly, please charge Deposit Account No. 04-1415 in the amount of \$120.00, for a 1-month extension of time fee. The Assignee believes no further fees or petitions are required. However, if any such petitions or fees are necessary, please consider this a request therefor and authorization to charge Deposit Account No. 04-1415 accordingly.

If the Examiner should require any additional information or amendment, please contact the undersigned attorney.

Dated: 6-28-2008

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Rob Tuttle", is written over a horizontal line.

Robert M. Tuttle, Registration No. ~~54~~,504
Attorney for Assignee
USPTO Customer No. 66083

DORSEY & WHITNEY LLP
Republic Plaza Building, Suite 4700
370 Seventeenth Street
Denver, Colorado 80202-5647
Phone: (303) 629-3400
Fax: (303) 629-3450